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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,483	01/03/2002	Gareth Hougham	YOR920010117US1; 950-0101	8142

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EXAMINER

LEE, JINHEE J

ART UNIT PAPER NUMBER

2831

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/038,483

Applicant(s)

HOUGHAM, GARETH

Examiner

Jinhee J Lee

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 and 22-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Newly submitted claims 22-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group (method), there being no allowable generic or linking claim. Election was made **with** traverse in Paper No. 6.

### ***Allowable Subject Matter***

2. The indicated allowability of claim 15 is withdrawn in view of the newly discovered reference(s) to Berger et al. in view of Momose. Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the limitation "the second position, may be in a compressed state" in lines 2-3. This is confusing; claim 14 already indicates that second position is compressed. Examiner suggests "the second, compressed position" as disclosed in claim 14.

Claim 15 recites the limitation "the third position, being the expanded position" in line 4. This is confusing. Examiner suggests "the third, expanded position" as disclosed in claim 14.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 14, 19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Berger et al. (US006287126B1).

Re claim 14, Berger et al. discloses a contact comprising: a flexible conductive body (13 or 15 for example) formed in a first position and adapted to be set into a second, compressed position and activated (see column 6 lines 49-54 according to the number in the middle) into a third, expanded position in order to accommodate a variable gap between the first electronic device (1 for example) and the second electronic device (3 for example) (see figure 1). Note that it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Re claim 19, Berger et al. discloses a contact wherein the contact is selected from the contacts having a shape of an E, a C, a Random coil spring, and a helical spring (see figure 1).

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Re claim 20, Berger et al. discloses a contact comprising: a conductive body (13 or 15 for example) adapted to be formed in a first, uncompressed state, deformed into a second compressed state that is maintained until the body is activated (see column 6 lines 49-54 according to the number in the middle) to expand into a third state from the compressed state that accommodates a gap and established the electrical connection (see figure 1). Note that it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 15-18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger et al. in view of Momose (JP 03023379A).

Re claim 15, Berger et al. substantially discloses contact as set forth in claim 15 wherein the contact, in the second, compressed position; a shape memory material translates to the third, expanded position. Berger et al. does not explicitly disclose that the heat activates the shape memory material. However, Momose teaches that Nickel Titanium alloy shape memory parts have shape-recovery characteristics that depend on the temperature (see abstract). It would have been obvious to one having ordinary skill

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in the art at the time the invention was made to use heat to activate the shape memory material as taught by Momose on the device of Berger et al. in order to provide continuous connection.

Re claim 16, note that the device of Berger et al. includes using a nickel titanium alloy as the shape memory material (see column 5 lines 6-10).

Re claim 17, the assembly of Berger et al./Momose discloses the claimed invention except that the material has a martinsitic transition temperature in the range between -20 to 100 degrees C. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the material with a martinsitic transition temperature in the range between -20 to 100 degrees C, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Re claim 18, note that the device of Berger et al. includes using a superelastic material as the shape memory material (see column 5 lines 6-10).

Re claim 21, Berger et al. substantially discloses contact as set forth in claim 20 wherein the conductive body expands into the third state. Berger et al. does not explicitly disclose that predetermined amount of heat activates the expansion. However, Momose teaches that Nickel Titanium alloy shape memory parts have shape-recovery characteristics that depend on the temperature (see abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made

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to use heat to activate the conductive body as taught by Momose on the device of Berger et al. in order to provide continuous connection.

***Response to Arguments***

9. Applicant's arguments with respect to claims 14, 19 and 20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jinhee J Lee whose telephone number is 703-306-0154. The examiner can normally be reached on M, T, Th, F at 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A Reichard can be reached on 703-308-3682. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

jil  
August 27, 2003

*Dean A. Reichard* 8/29/03  
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